

Name _____

1. E.8.1 Outline and compare the various methods for waste disposal. (3) *Examples include landfills and incineration.*

- a. What is MSW?
- b. What are the most common methods of disposal of MSW?
- c. What are the five categories of landfill materials?
- d. Discuss how landfills are formed, draw your own diagram:
- e. Two types of decomposition are present in landfills, explain what is produced in each:
- f. How can heavy metals and cyanide be removed from the leachate?
- g. What are the benefits of incineration?

- h. Complete the following table with information regarding the two main methods of incineration:

Rotary-kiln Incinerator	Fluidized-bed Incinerator

- i. Discuss the air pollution as a result of incineration:

2. E.8.2 Describe the recycling of metal, glass, plastic and paper products, and outline its benefits. (2)

- a. Why is recycling waste beneficial?

- b. Complete the following table with information regarding each type of material to be recycled:

Glass Recycling	
Metal Recycling	
Aluminum Recycling	

Steel Recycling	
Plastic Recycling	
Biodegradable Plastic Recycling	

3. E.8.3 Describe the characteristics and sources of different types of radioactive waste. (2) *Include both low-level and high-level radioactive waste.* E.8.4 Compare the storage and disposal methods for different types of radioactive waste. (3)

a. What is Radioactivity?

b. Complete the following table on the different types of Radiation:

Type of Radiation	Explanation	Equation
Alpha		
Beta		
Gamma		

c. What is in nuclear waste?

d. Explain, using a diagram, the process of nuclear fission:

e. Describe the characteristics of different types of nuclear waste:

Type of Nuclear Waste	Characteristics/Disposal	Sources
High-level Wastes		
Low-level Wastes		

f. How are radioactive medical wastes disposed of?